

Stanyl® MC50

PA46-GF35 FR

35% Glass Reinforced, Flame Retardant (halogen- phosphorous-free)

Properties	Typical Data	Unit	Test Method
Rheological properties			
	dry / cond		
Molding shrinkage (parallel)	0.4 / *	%	ISO 294-4
Molding shrinkage (normal)	1.1 / *	%	ISO 294-4
Mechanical properties			
	dry / cond		
Tensile modulus	12500 / 8000	MPa	ISO 527-1/-2
Stress at break	200 / 140	MPa	ISO 527-1/-2
Strain at break	2.5 / 3.6	%	ISO 527-1/-2
Flexural modulus	12500 / 8000	MPa	ISO 178
Charpy impact strength (+23°C)	60 / 70	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	12 / 13	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	11 / -	kJ/m ²	ISO 180/1A
Thermal properties			
	dry / cond		
Melting temperature (10°C/min)	295 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	290 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	290 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.35 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.4 / *	E-4/°C	ISO 11359-1/-2
Relative Temperature Index – electrical	65	°C	UL746B
RTI electrical (Thickness (1) tested)	0.75	mm	UL746B
Electrical properties			
	dry / cond		
Volume resistivity	>1E13 / 1E11	Ohm*m	IEC 62631-3-1



Property Data

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Electric strength	33 / 30	kV/mm	IEC 60243-1
Comparative tracking index	425 / -	V	IEC 60112
Relative permittivity (100Hz)	4.8 / 11.2	-	IEC 62631-2-1
Relative permittivity (1 MHz)	4.4 / 5.2	-	IEC 62631-2-1
Other properties			
	dry / cond		
Humidity absorption	2.3 / *	%	Sim. to ISO 62
Density	1490 / -	kg/m ³	ISO 1183

